

Amendments to the Claims

The listing of claims below is intended to replace all prior listings of the claims in the present application.

1-67 (canceled)

68. (presently amended) A method of regulating protein kinase C activity comprising:

contacting protein kinase C with a mammalian biliverdin reductase, or an active a fragment or variant thereof with protein kinase C regulatory activity, or a polypeptide comprising the amino acid sequence of SEQ ID NO: 16 or 17, under conditions effective to regulate protein kinase C activity.

69. (previously added) The method according to claim 68, wherein the protein kinase C is a human protein kinase C.

70. (previously added) The method according to claim 69, wherein the human protein kinase C is selected from the group of protein kinase C isozymes α , β , and γ .

71. (previously added) The method according to claim 68, wherein said contacting is carried out with rat or human biliverdin reductase.

72. (presently amended) The method according to claim 71, wherein the biliverdin reductase is human biliverdin reductase comprising an amino acid sequence according to ~~SEQ. ID. No.~~ SEQ ID NO: 1 or ~~SEQ. ID. No.~~ SEQ ID NO: 3.

73. (presently amended) The method according to claim 68, wherein said contacting is carried out with a ~~fragment of rat biliverdin reductase comprising an amino acid sequence according to SEQ. ID. No. 18 or SEQ. ID. No. 19 or a fragment of human biliverdin reductase comprising an amino acid sequence according to SEQ. ID. No. 34 or~~

~~SEQ. ID. No. 35~~ a polypeptide comprising the amino acid sequence of SEQ ID NO: 16 or 17.

74. (presently amended) The method according to claim ~~±~~ 68, wherein said contacting is carried out in ~~the~~ a cell.

75. (previously added) The method according to claim 74, wherein the cell is *in vivo*.

76. (previously added) The method according to claim 74, wherein the cell is *in vitro*.

77. (new) The method according to claim 68, wherein said contacting is carried out with a polypeptide comprising the amino acid sequence of SEQ ID NO: 18, 19, 34, or 35.
